AERONAUTICAL TELECOMMUNICATION NETWORK PANEL
Working Group 3

Rio de Janeiro, March 16-20, 1998

ATNP/WG3/SG3 Progress Report

(Presented by Steve Van Trees (USA))

Summary
Some will tell you that you are mad, and nearly all will say, 'What is the use?' For we are a nation of shopkeepers, and no shopkeeper will look at research which does not promise him a financial return within a year. And so you will sledge nearly alone, but those with whom you sledge will not be shopkeepers: that is worth a good deal. If you march your Winter Journeys you will have your reward, so long as all you want is a penguin's egg.
Apsley Cherry-Garrard, <u>The Worst Journey in the World,</u> 1922

1. Introduction

ATNP/WG3 is responsible for Upper Layer Architecture (ULA). The group is responsible for SARPs Sub-Volume 4 (Upper Layer Communications Service), SARPs Sub-Volume 4 Enhancements (Secure Dialogue), SARPs Sub-Volume 6 (System Management), and SARPs Sub-Volume 7 (Data Dictionary).

2. ATNP/WG3/SG3 Requirements

ATNP/WG3/SG3 in its work plan responds to the following requirements of ATNP/WG1.

Task	Description
B&C	Develop a Security Strategy for the ATN
D&E	Develop a System Management Strategy
X	Multicast

3. ATNP/WG3/SG3 Work Plan

ATNP/WG3/SG3 offers the following overview of its work plan.

SARPs	Topic	Responsible	Rio Deliverable	Utrecht Deliverable
Sub-Volume 4	Secure Dialogue	Mittaux-Biron	Security Overview	Security Draft
Sub-Volume 4	Connectionless Multicast	Van Trees	Connectionless Draft	Connectionless Final
Sub-Volume 4	ASO-ACSE	Van Trees	ASO-ACSE Draft	ASO-ACSE Final
Sub-Volume 6	System Management	Kerr	Sub-Volume 6 Draft	Sub-Volume 6 Final
Sub-Volume 7	Data Dictionary	Moulton	None	Draft X.500 Schema

4. Schedule

Observing the work plan, we note that Connectionless Multicast and System Management are on the schedule set in Redondo Beach. We note that ASO-ACSE is nearing completion as a base standard. The Secure Dialogue Service requires intensive work before Utrecht within the framework presented at this meeting.

The work on the Data Dictionary (X.500 Schema) has not yet commenced. The need for coordination with WG3/SG1 on use of X.500 is also important.

5. Recommendation

WG3 is invited to approve the work plan provided.

ATNP/WG3/SG3 (Upper Layer Architecture)
17-18 February 1998
Gatwick

Meeting Report

The meeting was hosted by Brian Cardwell of UK NATS at London Gatwick. SG3 thanks Mr. Cardwell for the meeting facilities.

Attendance
Martin Adnams (Eurocontrol)
Michael Asbury (UK)
Brian Cardwell (UK)
Paul Hennig (IATA)
Tony Kerr (Eurocontrol)
Gerard Mittaux-Biron (France)
James Moulton (USA)
Frederic Picard (France)
Stephen Van Trees (USA) (Chair)
Tony Whyman (Eurocontrol)

1. Review of SARPs
Mr. Kerr reviewed PDRs outstanding after CCB-4.
PDR 97110002 (Encoding) notes that, per the PER standard, all encoding at the Presentation Layer boundary shall utilize OCTET STRING encoding, whereas the SARPs utilize BIT STRING encoding.   The group adopted an antinomian attitude, noting that the published SARPs worked, and that the inconsistency with PER can be noted in Guidance Material.
ACTION: (Van Trees) To whom do we send new GM? CAMAL? CCB?
The PDR was ACCEPTED (CCB-4), and recommended as REJECTED (CCB-5).
PDR 97120001 (AE Titles) notes that, due to the incorporation of the aircraft-id in the AE-title, only one instance of an application may be named per aircraft. This was agreed to be a future limitation, as multiple System Management entities populate an aircraft. The naming construct is extensible, such that this can be done by adding another arc to the naming tree.
The PDR was ACCEPTED (CCB-4), and recommended as FORWARDED (CCB-5).

It was noted that all enhancements (e.g., multiple-instance naming and the connectionless ULA) are being carried forward in an ATNP/3 Engineering Version.

2. Security
There were no papers reviewed at the meeting.
ACTION: (Van Trees) ACSE Information Object Use
ACTION: (Moulton)   X.500 Schema
ACTION: (Kerr-Van Trees)   X.500-CM Relation
ACTION: (Mittaux-Biron-Van Trees) Secure Dialogue Service
ACTION: (Mittaux-Biron) X.509 Profile
ACTION: (Mittaux-Biron) ST-ASE
ACTION: (Mittaux-Biron) SE-ASE

3. System Management
The group reviewed Sub-Volume 6 (System Management) of the ATN SARPs. Mr. Kerr had made major advances on the work. The group agreed an ATN-ULA-based system management stack profile. The work includes an implicit D-START approach as previously worked in Banff. The group also reviewed major input on ATN managed objects. The group agreed that CMIP ASN.1 Extensibility and ROSE independence was not worth base-standard instability in terms of overhead savings.
ACTION: (Kerr) Sample CMIP PDU Encodings.
ACTION: (Kerr) Review M-GET overhead results to confirm above analysis in light of SM conops

ACTION: (Kerr) Insert local identifer rather than OID in AOM12
ACTION: (Moulton) Forward WG1/SG3 Manager-Manager requirements
ACTION: (Picard) Review ISO Upper Layer MOs
ACTION: (Moulton) Forward WG3/SG1 MHS Management requirements
ACTION: (Picard) Forward Application Management requirements

4. CNS/ATM-2

Mr. Van Trees presented his work on the connectionless upper-layer profile. Mr. Picard had contributed major comments on the document. The document was revised for Rio during the meeting. There are still specific actions in the document in terms of multicast support and profile overhead.

Mr Whyman and Mr Adnams visited the group to coordinate lower-layer multicasting. From the presentation, the work appeared solid, and in line with the upper-layer multicasting approach.

ACTION: (Van Trees-Moulton) Comment lower-layer multicasting, especially upper-layer addressing.
ACTION: (Van Trees) ASO Template Development
ACTION: (Kerr) Fast Associate Enhancement

5. Base Standards

Mr. Van Trees regaled the group with yet another chapter of the ACSE, Edition 3 saga, noting that the next meeting thereof is in Beijing.

6. WG3 Rio de Janeiro Prep

The following papers are to be presented at RJ:
SG3 Report (Van Trees)
Security (Mittaux-Biron)
Sub-Volume 6 System Management (Kerr)
Connectionless ULA (Van Trees)
ASO-ACSE Status Report (Van Trees)

7. Next Meeting

SG3 is contemplating its next meeting in April 1998, with emphasis on secure upper layers.